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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,261

03/01/2004

Takayuki Suzuki

17500

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23389

7590

03/04/2008

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EXAMINER

LANG, AMY T

ART UNIT

PAPER NUMBER

3731

MAIL DATE

DELIVERY MODE

03/04/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/790,261	SUZUKI, TAKAYUKI	
	<b>Examiner</b>	<b>Art Unit</b>	
	AMY T. LANG	3731	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/27/2004, 03/01/2004</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. **Claim 7** is objected to because of the following informalities: claim 7 recites wherein the first axis "extending the distal end and proximal end." However it is the examiner's position that this phrasing should be replaced with first axis "extending *between* the distal end and proximal end so that the first axis is present between the two ends and not only the at the ends. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claim 10** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 10 recites wherein the "treatment section is a clip." However, claim 7 from which claim 10 depends recites that the treatment section receives rotation force from the rotation control section. Therefore, it is the examiner's position that the claim should either be amended so to read wherein "the treatment section is *an end effector*" as recited in paragraph [0123] of the instant specification or "the treatment section *further comprises* a clip."

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1-17** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(i) claims 1, 2, 3, 7, 13, and 16 use the term "vertical" to describe the directional relationship of the center axis, first axis, second axis, and third axis, ex. "vertical to the first axis." However, it is the examiner's position that the term "vertical" is confusing when used for directional purposes and should be replaced with "perpendicular" or "parallel."

(ii) claims 1, 2, 3, 7, 13, and 16 recite wherein the second axis and third axis are "passing across" the center axis. It is the examiner's position that this term is confusing since it unclear if the second and third axes bisect the center axis or if they are parallel and overlay the center axis.

(iii) claims 1, 4, 5, 7, 13, and 16, recite wherein the wire has the same flexural rigidity and a lower torsional than that of a "reference wire having a perfect circle section." However, it is the examiner's position that the claimed reference wire is confusing since it is clear as to what flexural rigidity and torsional rigidity this wire comprises.

(iv) claim 3 recites wherein the vertical section is formed to have "the dimension" along the second axis larger than "the dimension" along the third axis. However, it is

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the examiner's position that this phrasing is confusing since it is unclear as to what the dimension refers to.

6. **Claim 3** recites the limitation "the dimension" in lines 12 and 13. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

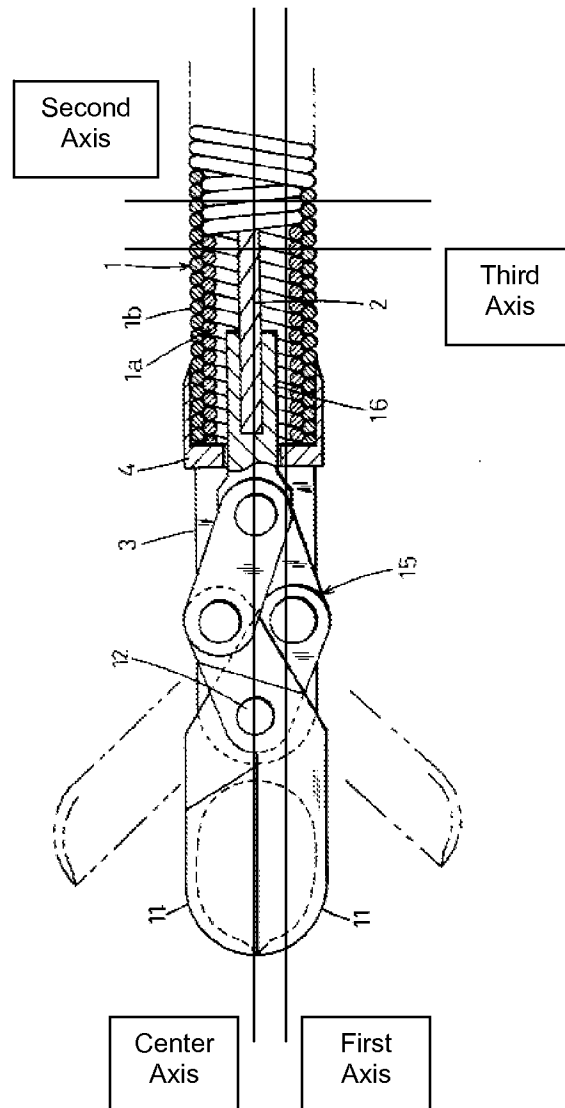
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1-9, 12, 16, and 17** are rejected under 35 U.S.C. 102(e), as best understood, as being anticipated by Ouchi (US 6,443,909 B1).

With regard to **claims 1, 3, 4, 5, and 16** Ouchi discloses a close wound coil (see entire document) wound spirally over a first axis (Figure 2). A center axis, parallel to the first axis, runs the length of the coil. As shown in Figure 2, the coil comprises a wound portion of the wire that is vertical to the center axis. Second and third axes bisect the first and center axes. It is the examiner's position that the coil of Ouchi would comprise the substantially the same flexural rigidity and lower torsional rigidity as that of a

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reference wire since the rigidity of the reference wire is not properly defined in the instant claims.



With regard **claim 2**, it is the examiner's position that when the second axis comprises a portion of the wound coil that curves a greater degree inward during the curved spiral than the portion of wound coil the third axis comprises, the second moment of area concerning the second axis is smaller than the second area moment of area concerning the third axis

With regard to **claim 7**, Ouchi discloses a medical treatment tool comprising the coil as described above, a rotation control section (30, 33), and a treatment section (10) (column 2, lines 30-31; column 4, lines 49-55).

With regard to **claim 8**, as shown in Figure 2, the treatment tool (11) is fixed to the distal end of the close wound coil.

With regard to **claims 9 and 17**, Ouchi discloses control wire (2) is connected to the treatment section to rotate the control section (column 3, lines 46-55). This control wire also overlaps the instantly claimed extension control.

With regard to **claims 6 and 12**, Ouchi teaches that the coil can be inserted into an endoscope (column 1, lines 43-42).

9. **Claims 1-10 and 12-17** are rejected under 35 U.S.C. 102(e), as best understood, as being anticipated by Smith (US 6,824,548 B2).

With regard to **claims 1, 3, 4, 5, and 16** Smith discloses a close wound coil (12) (see entire document) wound spirally over a first axis (Figure 2). The coil of Smith also comprises a center axis, a first axis, a second axis, and a third axis, as discussed above in paragraph 8 for the coil of Ouchi. As shown in Figure 2, the coil of Smith comprises a wound portion of the wire that is vertical to the center axis. It is the examiner's position that the coil of Smith would comprise substantially the same flexural rigidity and lower torsional rigidity as that of a reference wire since the rigidity of the reference wire is not properly defined in the instant claims.

With regard **claim 2**, it is the examiner's position that when the second axis comprises a portion of the wound coil that curves a greater degree inward during the curved spiral than the portion of wound coil the third axis comprises, the second moment of area concerning the second axis is smaller than the second area moment of area concerning the third axis

With regard to **claim 7**, Smith discloses a medical treatment tool comprising the coil as described above, a rotation control section (62), and a treatment section (13) (column 1, lines 17-25; column 9, lines 12-21).

With regard to **claims 13 and 15**, as shown in Figure 2, the coil is inserted into mantle tube (150).

With regard to **claim 8**, as shown in Figure 1, the treatment tool (13) is fixed to the distal end of the close wound coil.

With regard to **claims 9 and 17**, Smith discloses control wire (60) is connected to the treatment section to rotate the control section (column 5, lines 58-62). This control wire also overlaps the instantly claimed extension control.

With regard to **claims 6, 12, and 14**, Smith teaches that the coil can be inserted into an endoscope (column 7, line 66 through column 8, lines 4).

With regard to **claim 10**, the treatment section further comprises an end effector that distally advances clips (column 5, lines 17-20).



***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US 6,824,548 B2) in view of Ouchi (US 6,443,909 B1).

As discussed in paragraph 9 above, Smith discloses a medical treatment tool comprising a coil. However, Smith does not specifically disclose the use of more than one coil.

Ouchi, as discussed in paragraph 8 above, discloses a similar medical treatment tool comprising a coil. Ouchi teaches that a medical device comprising two coils can advantageously respond to rotational movement without twisting (column 3, lines 1-7). Therefore, it would have been obvious to one of ordinary skill at the time of the invention for the medical device of Smith to comprise two coils for the advantages taught by Ouchi.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMY T. LANG whose telephone number is (571)272-9057. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

02/25/2008  
/Amy T Lang/  
Examiner, Art Unit 3731/Todd E Manahan/  
Supervisory Patent Examiner, Art Unit 3731